AMENDMENT

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An automated task classification system that operates on a task objective of a user, comprising:

a recognizer that spots at least one of a plurality of meaningful phrases in ~~an input communication of the user including~~ <u>substantially simultaneous user</u> verbal ~~input~~ and non-verbal input, each of the plurality of meaningful phrases having an association with at least one of a predetermined set of task objectives; and

a task classifier that makes a classification decision based, at least partly, on the spotted at least one of the plurality of meaningful phrases.

2. (Original) The automated task classification system of claim 1, wherein the meaningful phrases are expressed in a multimodal form.

3. (Original) The automated task classification system of claim 2, wherein the multimodal form includes inputs from at least one channel.

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Original) The automated task classification system of claim 1, wherein the meaningful phrases in the user's input communication received by the recognizer are derived from the user's actions.

8. (Cancelled)

9. (Original) The automated task classification system of claim 1, further comprising a dialog module that enters into a dialog with the user to obtain a feedback response from the user.

10. (Original) The automated task classification system of claim 9, wherein the dialog module prompts the user to provide a feedback response that includes additional information with respect to the user's initial input communication.

11. (Original) The automated task classification system of claim 9, wherein the dialog module prompts the user to provide a feedback response that includes confirmation with respect to at least one of the set of task objectives determined in the classification decision.

12. (Original) The automated task classification system of claim 1, wherein the task classifier routes the input communication based on the classification decision.

13. (Original) The automated task classification system of claim 12, wherein the task objective is performed after the input communication is routed by the task classifier.

14. (Cancelled)

15. (Original) The automated task classification system of claim 1, wherein the system is used for customer care purposes.

16. (Previously Presented) The automated task classification system of claim 1, wherein the classification decision and the corresponding input communication of the user are collected by the system for automated learning purposes.

17. (Previously Presented) The automated task classification system of claim 1, wherein the association between the plurality of meaningful phrases and the predetermined set of task objectives is based, at least partly, on a measure of usefulness of one of the plurality of meaningful phrases to a specified one of the predetermined task objectives.

18. (Original) The automated task classification system of claim 17, wherein the usefulness measure is a salience measure.

19. (Previously Presented) The automated task classification system of claim 18, wherein the salience measure is represented as a conditional probability of the task objective being requested given an appearance of one of the plurality of meaningful phrases in the input communication, the conditional probability being a highest value in a distribution of conditional probabilities over the set of predetermined task objectives.

20. (Previously Presented) The automated task classification system of claim 18, wherein each of the plurality of meaningful phrases has a salience measure exceeding a predetermined threshold.

21. (Previously Presented) The automated task classification system of claim 1, wherein the association between the meaningful phrases and the predetermined set of task objectives is based, at last partly, on a measure of commonality within a language of the meaningful phrases.

22. (Previously Presented) The automated task classification system of claim 21, wherein the measure of commonality is a mutual information measure.

23. (Previously Presented) The automated task classification system of claim 22, wherein each of the plurality of meaningful phrases has a mutual information measure exceeding a predetermined threshold.

24. (Original) The automated task classification system of claim 1, wherein the task classifier makes the classification decision using a confidence function.

25. (Original) The automated task classification system of claim 1, wherein the input communication from the user represents a request for at least one of the set of predetermined task objectives.

26. (Original) The automated task classification system of claim 1, wherein the input communication is responsive to a query of a form "How may I help you?".

27. (Previously Presented) The automated task classification system of claim 1, wherein each of the verbal input and the non-verbal input are directed to one of the set of predetermined task objectives and each of the verbal input and the non-verbal input is labeled with the one task objective to which it is directed.

28. (Currently Amended) An automated routing system that automatically routes a user's request based on an automated task classification decision, comprising:

a recognizer that spots at least one of the plurality of meaningful phrases in ~~the user's request including~~ substantially simultaneous user verbal ~~input~~ and non-verbal input, each of the plurality of meaningful phrases having an association with at least one of a predetermined set of task objectives;

a task classifier that makes a classification decision based, at least partly, on the spotted at least one of the plurality of meaningful phrases; and

a task router that routes the user's request in order to perform at least one of the task objectives based on the classification decision.

29. (Original) The automated routing system of claim 28, wherein the meaningful phrases are expressed in multimodal form.

30. (Original) The automated routing system of claim 29, wherein the multimodal form includes inputs from at least one channel.

31. (Cancelled)

32. (Cancelled)

33. (Cancelled).

34. (Original) The automated routing system of claim 28, wherein the meaningful phrases in the user's input communication received by the recognizer are derived from the user's actions.

35. (Cancelled)

36. (Original) The automated routing system of claim 28, further comprising a dialog module that enters into a dialog with the user to obtain a feedback response from the user.

37. (Original) The automated routing system of claim 36, wherein the dialog module prompts the user to provide a feedback response that includes additional information with respect to the user's request.

38. (Original) The automated routing system of clam 36, wherein the dialog module prompts the user to provide a feedback response that includes confirmation with respect to at least one of the set of task objectives determined in the classification decision.

39. (Previously Presented) The automated routing system of claim 36, wherein if the task classifier cannot make a classification decision after the dialog is conducted with the user, the router routes the user's request to a human for assistance.

40. (Original) The automated routing system of claim 39, wherein the task objective is performed after the user's request is routed.

41. (Cancelled)

42. (Original) The automated routing system of claim 28, wherein the system is used for customer care purposes.

43. (Previously Presented) The automated routing system of claim 28, wherein the classification decision and the corresponding user request are collected by the system for automated learning purposes.

44. (Previously Presented) The automated routing system of claim 28, wherein the association between the plurality of meaningful phrases and the predetermined set of task objectives is based, at least partly, on a measure of usefulness of one of the plurality of meaningful phrases to a specified one of the predetermined task objectives.

45. (Original) The automated routing system of claim 44, wherein the usefulness measure is a salience measure.

46. (Previously Presented) The automated routing system of claim 45, wherein the salience measure is represented as a conditional probability of the task objective being requested given an appearance of the meaningful phrase in the user's request, the conditional probability being a highest value in a distribution of conditional probabilities over the set of predetermined task objectives.

47. (Previously Presented) The automated routing system of claim 45, wherein each of the plurality of meaningful phrases has a salience measure exceeding a predetermined threshold.

48. (Previously Presented) The automated routing system of claim 28, wherein the association between the plurality of meaningful phrases and the predetermined set of task objectives is based, at least partly, on a measure of commonality with a language of the plurality of meaningful phrases.

49. (Previously Presented) The automated routing system of claim 48, wherein the measure of commonality is a mutual information measure.

50. (Previously Presented) The automated routing system of claim 49, wherein each of the plurality of meaningful phrases has a mutual information measure exceeding a predetermined threshold.

51. (Original) The automated routing system of claim 28, wherein the task classifier makes the classification decision using a confidence function.

52. (Original) The automated routing system of claim 28, wherein the user's request represents a request for at least one of the set of predetermined task objectives.

53. (Original) The automated routing system of claim 28, wherein the user's request is responsive to a query of a form "How may I help you?".

54. (Previously Presented) The automated routing system of claim 28, wherein each of the verbal input and the non-verbal input are directed to one of the set of predetermined task objectives and each of the verbal input and the non-verbal input being labeled with the one task objective to which it is directed.

55. (Cancelled)

56. (Previously Presented) The automated task classification system of claim 1, further comprising:

an interpretation module configured to apply a confidence function based on a probabilistic relation between the spotted at least one of the plurality of meaningful phrases in the input communication of the user and the at least one of the predetermined set of task objectives, wherein

the task classifier makes the classification decision based, at least partly on, a result of the applied confidence function.

57.   (Previously Presented) The automated routing system of claim 28, further comprising

an interpretation module configured to apply a confidence function based on a probabilistic relation between the spotted at least one of the plurality of meaningful phrases in the user's request and the at least one of the predetermined set of task objectives, wherein

the task classifier makes the classification decision based, at least partly, on a result of the applied confidence function.